

## **Utilities and Engineering**

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February 10, 2016

Mr. Ervin Lane
North Carolina Department of Environmental Quality
Division of Waste Management
Solid Waste Section
1646 Mail Service Center
Raleigh, North Carolina 27699-1646



Subject:

Catawba County, North Carolina Closed Newton Sanitary Landfill

Methane Monitoring Well Exceedance Notification

Permit No. 1801-MSWLF-1973

Dear Mr. Lane:

During recent monthly methane monitoring events at the closed Newton Sanitary Landfill, methane concentrations exceeding the state regulatory limits were measured in three methane monitoring wells (GP-7/MW-P7, GP-8/MW-P8, and GP-11/MW-P11). In an effort to eliminate future exceedances in these monitoring wells, Catawba County is submitting this proposed plan for improved site access in order to facilitate improved system maintenance.

Monitoring wells MW-P7 and MW-P8 are located along the western property line approximately 10 feet from the edge of waste and MW-P11 is located along the northern property line, also about 10 feet from the edge of waste (See **Figure 1**). Catawba County (County) implemented a methane migration remediation plan, in July 2011, as documented in the document titled *Methane Migration Remediation Completion Report*. The report determined that landfill gas (LFG) migration was directly related to performance of the LFG extraction system at the site. In addition to completing a several immediate remedial actions that included increasing vacuum on the system and pumping leachate from several extraction wells, the County also completed the following LFG system improvements:

- Installed replacement extraction wells close to existing extraction wells that were not performing well along the western side of the landfill.
- Installed additional extraction wells along western and northern side of the landfill to provide closer spacing between wells.
- Installed new header piping and an additional condensate sump to provide maximum vacuum to the wells.

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The system improvements have worked to mitigate offsite migration, however, during periods of excess precipitation access to these areas is difficult and water accumulates in the gas lines, sumps, and wells resulting in a loss of vacuum. Once the site conditions improve and the LFG extraction wells can be accessed by the County, the wells are pumped dry which allows the LFG collection system vacuum to be restored. The increased vacuum at the extraction wells re-establishes the active collection of LFG which results in decreased levels of methane in the monitoring wells. In order to insure that water levels in the lines, sumps, and wells can be monitored and pumped or repaired as needed, the County is proposing to construct an all-weather access road to the wells and sumps near MW-P7, MW-P8, and MW-P11. The proposed location of the new access road is shown on Figure 1. Having an all-weather access road to this area will allow for more routine monitoring and maintenance as needed.

Catawba County intends to begin working on the new road within 1 month of your approval of this plan.

If you have any questions or comments, please do not hesitate to contact me at (704) 462-1348 or at rhamby@catawbacountync.gov.

Very truly yours,

Rodney Hamby Catawba County

cc: Charles Gerstell, DEQ SWS
Barry Edwards, Catawba County
Martin Sanford, CDM Smith

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